

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-65 (canceled).

Claim 66 (previously presented). A method for producing an exogenous interferon α or erythropoietin protein in an egg of a chicken, which method comprises:

- a) providing an avian leukosis viral vector comprising a nucleic acid sequence encoding an exogenous interferon α or erythropoietin protein, and a constitutive promoter operably linked to said sequence, wherein said promoter drives expression of the encoding sequence in the chicken oviduct;
- b) introducing said vector into chicken stage X embryonic cells;
- c) incubating said embryonic cells under conditions conducive to hatching live chicks;
- d) nurturing growth of a mature chimeric chicken from said chicks;
- e) mating said chimeric chicken, either naturally or via artificial insemination, with a non-transgenic chicken;
- f) identifying a transgenic chicken by screening the progeny of step e) for germ line incorporation of the protein encoding sequence; and
- g) mating the transgenic progeny with non-transgenic chickens to produce eggs containing the exogenous protein.

Claim 67 (previously presented). A method of claim 66 for producing an exogenous interferon α protein.

Claim 68 (previously presented). A method of claim 66 for producing an exogenous erythropoietin protein.

Claim 69 (previously presented). The method of claim 66 further comprising extracting the exogenous protein from the egg.

Claim 70 (previously presented). A method for producing an exogenous interferon α or erythropoietin protein in an egg of a chicken, which method comprises:

a) providing an avian leukosis viral vector comprising a nucleic acid sequence encoding an exogenous interferon α or erythropoietin protein, and a constitutive promoter operably linked to said sequence, wherein said promoter drives expression of the encoding sequence in the chicken oviduct;

b) introducing said vector into chicken stage X embryonic cells;

c) incubating said embryonic cells under conditions conducive to hatching live chicks;

d) nurturing growth of a mature chimeric chicken from said chicks;

e) mating said chimeric chicken, either naturally or via artificial insemination, with a non-transgenic chicken;

f) identifying a transgenic chicken by screening the progeny of step e) for germ line incorporation of the protein encoding sequence;

g) mating the transgenic progeny with non-transgenic chickens to produce said egg containing the exogenous protein; and

h) extracting the exogenous protein from the egg.

Claim 71 (previously presented). A method of claim 70 for producing an exogenous interferon α protein.

Claim 72 (previously presented). A method of claim 70 for producing an exogenous erythropoietin protein.

Claim 73-76 (canceled).